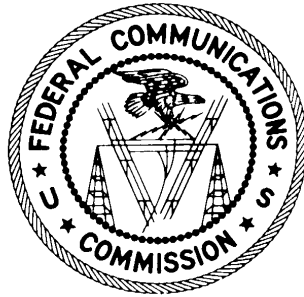# FCC
Strategic Human
Capital Plan

2007 - 2011

A Message from the Chairman

I am pleased to introduce the Federal Communications Commission's first Strategic Human Capital Plan. This plan was developed to ensure that the FCC maintains a highly skilled, motivated, well trained and engaged workforce ready to meet current and future challenges while serving the American public.

The FCC plays a vital role in our nation's economy. Our work touches the daily lives of the American people. As Chairman, I continue to be impressed by the professionalism, knowledge, dedication and commitment to public service demonstrated by the FCC's workforce.

Looking forward, a broad range of factors, including rapidly developing technology and changes in the legal landscape will continue to challenge the FCC's workforce.

To meet these challenges, while preparing for retirements among our staff and leadership, the FCC must continue to attract the highest caliber candidates, train our current workforce, and reward performance and innovation.

The strategic approach set forth in this plan will help make sure that the Commission has the highly skilled staff it needs to continue to effectively and efficiently accomplish our mission and serve the public interest.

Kevin J. Martin
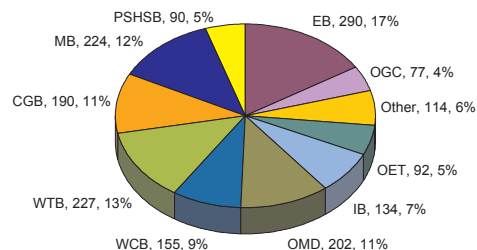Chairman

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I. About the FCC

The Federal Communications Commission (FCC), established by the Communications Act of 1934, is the United States' principal telecommunications regulatory agency. It operates as an independent agency responsible directly to Congress. The FCC is charged by Congress with regulating interstate and international communications by radio, television, wire, satellite, and cable. Our mission is to ensure that the American people have available – at reasonable rates and without discrimination – rapid, efficient, national and international communications services, whether by radio, television, wire, satellite, or cable.

The FCC regulates communications technologies that affect almost every aspect of life in the United States. For example, because almost all electrical and electronic equipment emits radio-frequency electromagnetic fields, the FCC's equipment-authorization rules are intended to prevent consumer products from receiving or emitting potentially harmful interference. Activities as diverse as using a wireless home network, swiping a credit card at a gasoline pump, or activating a home-alarm system before going to bed are impacted by Commission action. The FCC must also play a key role in promoting public safety and homeland security. The FCC oversees access to 911 emergency services and facilitates the availability of reliable communications systems for emergency-response personnel. The FCC also advances the universal availability of affordable telephone service, works to promote the delivery of communications services to all and protects and informs consumers about their rights. Moreover, the agency remains vigilant in the protection of consumers from indecency, violence and other unwanted content.

The people most directly charged with achieving these challenging objectives are the five Commissioners appointed by the President and confirmed by the Senate for five-year terms. The President also designates one of these Commissioners to act as the Chairman, who serves as chief executive officer of the Commission. The Chairman and the other Commissioners oversee all FCC policy activities. They delegate certain of their responsibilities among seven operating bureaus and ten staff offices. The operating bureaus are the: Media Bureau (MB), Wireless Telecommunications Bureau (WTB), Wireline Competition Bureau (WCB), International Bureau (IB), Enforcement Bureau (EB), Public Safety and Homeland Security Bureau (PSHSB) and Consumer and Governmental Affairs Bureau (CGB). The larger staff offices include the Office of Engineering and Technology (OET), the Office of General Counsel (OGC), and the Office of Managing Director (OMD).

FCC Staffing by Organization FY 2007

PSHSB, 90, 5%
MB, 224, 12%
CGB, 190, 11%
WTB, 227, 13%
WCB, 155, 9%
OMD, 202, 11%
IB, 134, 7%
OET, 92, 5%
Other, 114, 6%
OGC, 77, 4%
EB, 290, 17%

The staff of any particular Bureau or Office may perform multiple functions including processing license applications and requests for regulatory relief, analyzing and acting on industry or consumer complaints, conducting investigations, adjudicating disputes, developing regulations to implement Congressional requirements, and participating in regulatory or legislative hearings. While each Bureau and Office has discrete functions, many major FCC activities or initiatives require the expertise of multiple

Bureaus or Offices. As a result, Bureaus and Offices routinely work together on regulatory matters.

The FCC deploys its resources to achieve the following strategic goals:

Broadband: All Americans should have affordable access to robust and reliable broadband products and services. Regulatory policies must promote technological neutrality, competition, investment and innovation to ensure that broadband service providers have sufficient incentive to develop and offer such products and services.

Competition: Competition in the provision of communications services, both domestically and overseas, supports the Nation's economy. The competitive framework for communications services should foster innovation and offer consumers reliable, meaningful choices in affordable services.

Spectrum: Efficient and effective use of non-federal spectrum domestically and internationally promotes the growth and rapid deployment of innovative and efficient communications technologies and services.

Media: The Nation's media regulations must promote competition and diversity and facilitate the transition to digital modes of delivery.

Public Safety and Homeland Security: Communications during emergencies and crises must be available for public safety, health, defense, and emergency personnel, as well as all consumers in need. The Nation's critical communications infrastructure must be reliable, interoperable, redundant, and rapidly restorable.

Modernize the FCC: The FCC shall strive to be a highly productive, adaptive, and innovative organization that maximizes the benefit to stakeholders, staff and management from effective systems, processes, resources, and organizational culture.

To enable the FCC to fulfill its mandates and achieve its goals, Congress appropriates annual budgets of around $300 million of which the FCC will raise all but $1 million from regulatory fees, an additional allocation of about $85 million from spectrum auctions receipts to operate the spectrum auctions program and about $14 million for the administration of the FCC credit program. The day-to-day work of the FCC also generates additional revenue through fees and spectrum auctions that goes into the U.S. Treasury. The use of market mechanisms such as spectrum auctions has enabled the FCC to become a net contributor to the U.S. Government's public funding. For example, in 2006, the FCC spent a total of $289 million, but contributed $332 million to the U.S. Treasury through the collection of regulatory and application fees. From its inception in 1994 through 2006, the spectrum auction program has deposited almost $21 billion into the U.S. Treasury while only costing taxpayers about $800 million during the same time period.

II. Human Capital Strategy

Factors such as rapidly developing technology, convergence of delivery systems, demands for increased interoperability, marketplace consolidation, and changes in the legal landscape present exciting challenges for the Commission's work force. Because of shifts in communications markets and technologies, the FCC will continue to require a highly trained, expert staff capable of assessing and understanding technological and industry trends as well as the legal and economic challenges impacting the nation's communications systems.
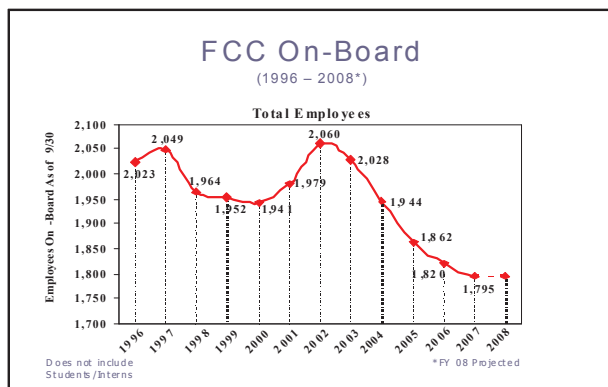
The FCC's human capital strategy, therefore, is to acquire, develop, and maintain a highly skilled, agile and engaged workforce committed

to continuous learning, with a strong cadre of leaders. Key features that need to be in place to ensure a successful human capital strategy at the FCC include the following:

- A recruiting strategy that will attract highly skilled, expert and adaptable talent;

- Learning programs to support staff in developing and maintaining legal, technical, and managerial expertise; and

- An organizational culture that encourages performance excellence, continuous learning, and knowledge sharing.

III. FCC's Workforce Analysis

The FCC employs a highly skilled workforce and is comprised of 1,795 employees. The Commission's key occupations are attorneys, economists, and engineers. These occupations account for approximately 47% of the FCC's workforce as follows: 510 attorneys, 56 economists, and 273 engineers. Other major categories of FCC employees include: 89 program/management analysts, 77 industry analysts, 64 Consumer Advocacy and Mediation Specialists, and 372 other specialists. The majority of FCC staff – 1310 employees – work

FCC On-Board
(1996 – 2008*)

Total Employees

Employees On-Board As of 9/30

- 1996: 2,023
- 1997: 2,049
- 1998: 1,964
- 1999: 1,952
- 2000: 1,941
- 2001: 1,979
- 2002: 2,060
- 2003: 2,028
- 2004: 1,944
- 2005: 1,862
- 2006: 1,820
- 2007: 1,795
- 2008: –

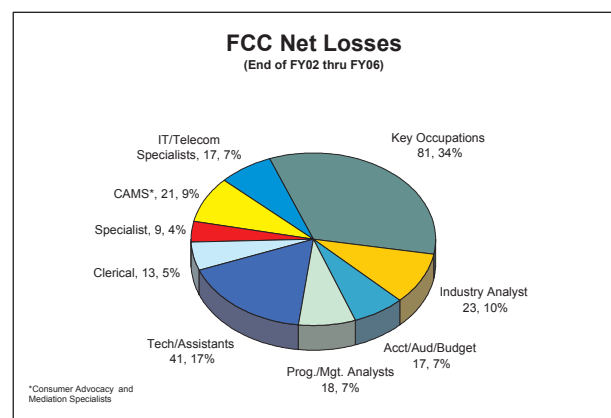Does not include Students/Interns
*FY 08 Projected

in one of the seven operating Bureaus. The 485 employees in the Offices generally support the

work of the Bureaus. Most of the FCC's workforce is located in Washington, D.C. Staff are also located in FCC facilities in Gettysburg, PA, Columbia, MD, and at 25 field stations throughout the continental United States, Alaska, Hawaii and Puerto Rico.

A. Attrition

From the end of FY02 through the end of FY06, the FCC showed a net loss of 240 staff.

FCC Net Losses
(End of FY02 thru FY06)

- Key Occupations: 81, 34%
- Industry Analyst: 23, 10%
- Acct/Aud/Budget: 17, 7%
- Prog./Mgt. Analysts: 18, 7%
- Tech/Assistants: 41, 17%
- Clerical: 13, 5%
- Specialist: 9, 4%
- CAMS*, 21, 9%
- IT/Telecom Specialists: 17, 7%

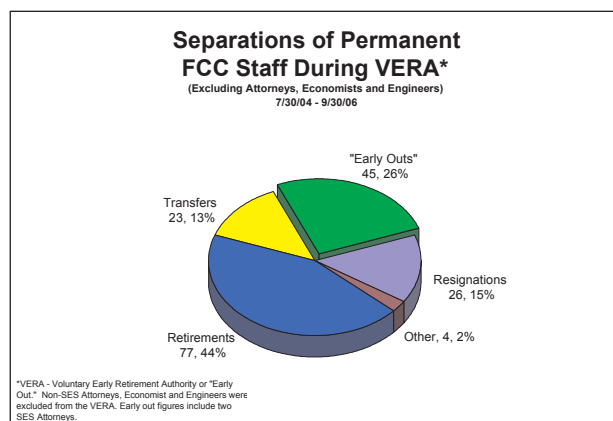*Consumer Advocacy and Mediation Specialists

The key occupations of attorney, economist and engineer represented 34% of this loss, while non-key occupations accounted for 66% of the attrition.

Within the key occupations, the number of attorneys on-board declined by 34 (6%), economists declined by four (7%) and engineers declined by 43 (14%).

B. Affect of VERA

Based on a workforce analysis conducted in 2004, the FCC offered "early-out" retirement to all occupations except for the key occupations of attorney, economist and engineer. The purpose was to begin reshaping the workforce by voluntarily reducing staff in non-key occupations. The "early out" offer successfully accelerated attrition in non-key areas and enabled the FCC to focus on reshaping the workforce to meet the Agency's core mission.

Twenty-six percent of separations of non-key permanent staff during the VERA timeframe were the result of the "early out." Of the 45 "early out" separations, 33 positions were

Separations of Permanent FCC Staff During VERA*
(Excluding Attorneys, Economists and Engineers)
7/30/04 - 9/30/06

"Early Outs" 45, 26%
Transfers 23, 13%
Resignations 26, 15%
Retirements 77, 44%
Other, 4, 2%

*VERA - Voluntary Early Retirement Authority or "Early Out." Non-SES Attorneys, Economist and Engineers were excluded from the VERA. Early out figures include two SES Attorneys.

eliminated and 12 were re-staffed. Of the 12 positions that were re-staffed, eight were filled through realignment within the Commission, and only four were filled as new external hires.

C. Retirement Eligibility in the Current Workforce

An analysis of the retirement eligibility of the current workforce indicates that a high percentage of supervisors in the key occupation of engineer will be eligible to retire in the near future. Beginning in FY 06, forty percent of the FCC's supervisory engineers were eligible for optional retirement, and by FY 09, over half of supervisory engineers will be eligible. Agency-wide, the analysis shows that there are just a few

Retirement Eligibility of FCC Supervisors

Occupational Category	On Board	Eligible FY06	Eligible FY09	Eligible FY11
Attorneys	123	14%	20%	29%
Engineers	53	40%	55%	55%
All FCC Occupations	289	24%	37%	44%

Does not include OCM, Commissioners' Offices or OALJ

= 30% or More Eligible to Retire

areas where there are high levels of retirement eligible attorneys. The percentage of supervisory economists eligible to retire over the next four years is not a concern because there is an ample pool of non-supervisory economists on staff should the need for supervisory economists arise. Agency-wide, across all occupations, 44 percent of the FCC's supervisors will be eligible to retire by FY 11.

The picture of retirement eligibility for non-supervisors differs somewhat. By FY 09, 31 percent of non-supervisory economists and 35 percent of non-supervisory engineers will be eligible for optional retirement. By FY 11, 44 percent of non-supervisory economists and 40 percent of non-supervisory engineers will be eligible to retire. Collectively, 37 percent of the non-supervisory workforce across all occupations will be eligible to retire by FY 11.

Retirement Eligibility of FCC Non-Supervisors

Occupational Category	On Board	Eligible FY06	Eligible FY09	Eligible FY11
Attorneys	370	8%	15%	20%
Economists	52	17%	31%	44%
Engineers	223	26%	35%	40%
All FCC Occupations	1508	19%	30%	37%

Does not include OCM, Commissioners' Offices or OALJ

= 30% or More Eligible to Retire

IV. The Strategic Human Capital Plan

Recognizing the strengths and weaknesses of the FCC's current workforce, the evolving challenges presented to the agency, and the retirement eligibility statistics available, the FCC's Strategic Human Capital Plan is designed

to develop a sophisticated professional workforce that can adapt and respond to the next generation technologies and legal and economic challenges presented by domestic and global telecommunications markets. As noted above, the strategy is comprised of three core objectives which are to recruit skilled and adaptable talent, increase and improve the current learning programs, and promote a culture that encourages performance excellence.

A. Recruitment Strategy: Programs, Policies, and Practices

As part of the FCC's Strategic Human Capital Plan, the Agency has instituted targeted hiring programs designed to recruit new talent, supplement the retiring workforce, and allow the retiring work force to transition and train the new hires as follows:

Engineer-In-Training

The FCC developed the Engineer-In-Training Program (EIT) to increase the number of highly skilled engineers throughout the Commission. Through targeted recruitment, the program attracts recent engineering school graduates with superior academic credentials and an interest in communications engineering and Internet Protocol networks. The program provides for accelerated promotions based on successful completion of formal on-the-job training.

Selection for participation in the EIT program is highly competitive. The EIT initiative includes multiple recruitment windows to attract summer, winter, and spring graduates. Enhancements to EIT recruitment include automated recruitment tools, public notices and advertisements in engineering publications. The FCC also conducted on-site recruitment at four OPM sponsored Federal Career Days aimed at attracting highly qualified engineering students. These ongoing efforts are producing a high volume of quality candidates for employment as FCC engineers.

Attorney Honors Program

The Attorney Honors Program is a formal recruitment and two-year training and development program designed to introduce recent law school graduates with superior academic credentials to the field of communications law and policy. During the two-year program, attorneys are provided professional and educational opportunities unique to program participants, including rotational opportunities after the first year. By providing highly challenging assignments and professionally enriching development, the FCC is able to attract excellent entry-level attorneys.

The FCC Attorney Honors Program announces a fall application window to enable the FCC to compete for top caliber students who participate in the traditional fall interview/job offer process. The agency's broad outreach and targeted recruitment efforts include law schools with communications law programs and top tier universities nationwide. The FCC also conducts on-campus interviews at local law schools.

Economist Recruitment Program

Most FCC economists are hired at the PhD level. Through targeted recruitment, the FCC hires top candidates with expertise in a field of applied microeconomics, statistics or applied econometrics. In order to attract the highest caliber candidates, the FCC advertises in professional economic publications prior to the American Economic Association (AEA) meeting held in January each year. Onsite recruitment/interviews coincide with job announcements. By centering recruitment around the AEA meeting, the FCC ensures the best candidates nationwide are available for the critical few job openings that occur in this key FCC occupation.

Percentage of All FCC Accessions
(FY04 - FY08*)
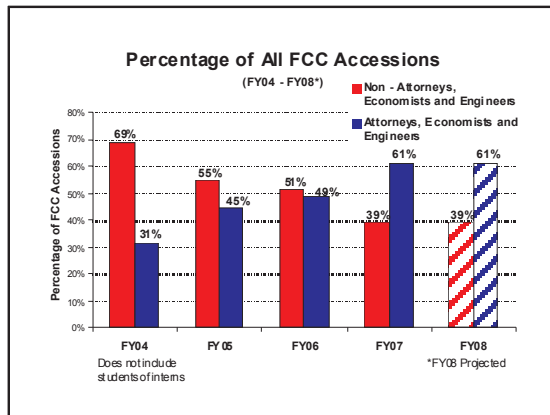
Since 2004, the hiring of attorneys, economists and engineers, as a percentage of accessions, has increased steadily, while the percentage of all other occupations has decreased.

B. Learning Program

The FCC has taken concrete steps to strengthen and improve its employee development programs. In specific, FCC University was established to provide the development resources to increase the fluency of Commission staff in communications technology, economics, and law. A feature of FCC University that has been fundamental to its success is the involvement of staff from throughout the Agency. Representatives of key occupations have been involved in defining the training needs and evaluating, designing and delivering internal courses. For example:

Excellence in Engineering

The Office of Engineering & Technology manages the Excellence-in-Engineering (EIE) Program that includes on-site courses and tutorials related to communications technology. Courses address both the foundation level knowledge that is required across all occupations, and the advanced knowledge and skills required by the engineering staff. The EIE Program also includes an Engineer-in-Training Program for

entry-level hires; a Graduate Degree Program in Engineering to develop advanced technical skills needed now and into the future; and a Knowledge Sharing Program to increase the lateral and vertical exchange of information among the staff.

Excellence in Economic Analysis

The Office of Strategic Planning and Policy Analysis manages the Excellence in Economic Analysis (EEA) Program to ensure that employees are fluent in the principles of communications economics. The program consists of ongoing training and development opportunities targeted at, but not limited to, staff economists; economics training for non-economists; and research tools such as data analysis software.

Excellence in Legal Analysis

The Office of General Counsel offers tutorials on legal subjects such as updates on recent case law involving the FCC, ethics training and overviews of specialties such as antitrust, bankruptcy, and administrative law.

Excellence in Research

The FCC Library offers tutorials on the use of the various online databases that they provide to support research on law, economics, and technology. They also support a lending library of books, training videos, and audio programs.
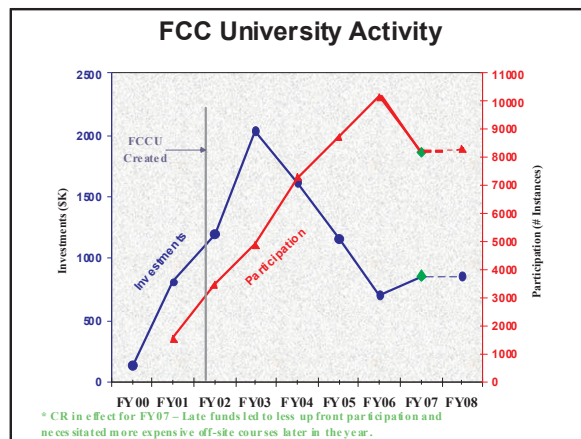
Involvement of FCC staff in delivering timely and relevant training programs has also enabled the Agency to increase staff participation while managing the size of investment needed for delivering an effective training program.

A key issue for the Agency is the development of management and leadership capability. The FCC's strategy is to develop leadership skills at

all levels so that executives have a well-trained cadre of leaders from whom to select. As such, FCC University offers a curriculum comprised of special programs targeting various levels of management, as well as continuing leadership education offerings that are available to both formal and informal leaders.

Because the press of business often makes it difficult for those in leadership positions to attend lengthy classes, FCC University also offers alternatives to the traditional classroom learning experience, such as online learning, reading and study groups, and fora that promote sharing of experience among managers.

Since much development takes place outside of the classroom, FCC University also provides individual and organizational development for managers, employees and teams. These programs are designed to: build leadership

FCC University Activity

* CR in effect for FY 07 – Late funds led to less up front participation and necessitated more expensive off-site courses later in the year.

capacity; enhance management team effectiveness and efficiency; support strategic planning; improve individual and organizational performance; and strengthen customer service inside and outside the agency.

Personal Development Plans (PDP) are required by staff at all levels to promote continuous learning. They are a useful tool for planning training and other developmental activities, and serve to focus the mid-year performance review

on individual development and organizational success.

C. FCC Performance Culture

The Performance Management System at the FCC links the FCC Strategic Plan to the Bureau and Office goals and objectives. Bureaus and Offices develop performance targets related to the program initiatives outlined by the Chairman in the FCC Strategic Plan. These targets are incorporated in the SES goals and then cascaded throughout the organization in the subordinate performance plans.

The FCC has these three performance appraisal programs for its employees:

SES Plan -- "Pay-for-Performance"

The SES "Pay-for Performance" plan covers all members of the Senior Executive Service. The plan places significant emphasis on results with meaningful measures, and differentiates pay based on level of responsibility and level of performance. The rating system has five levels: Level 5 – Distinguished, Level 4 – Meritorious, Level 3 -- Fully Meets Expectations, Level 2 -- Minimally Meets Expectations, and Level 1 – Unsatisfactory.

Supervisors and Management Officials Performance Plan

The Supervisors and Management Officials Performance Plan links individual and work unit performance to the FCC Strategic Plan. Performance is defined as the employee's accomplishment of assigned work identified in the critical job elements: Program Performance, Communication and Coordination, Leadership and Managing Change, and Managing Resources (optional for management officials). The rating system has four levels: Outstanding, Excellent, Fully Successful, and Unacceptable.

Non-Supervisors Performance Appraisal System

The Non-Supervisors Performance Appraisal System, which includes bargaining unit employees, contains one critical element which describes the core competencies required of all employees. The core competencies are: Job Knowledge, Technical Skills, Professional Application, and Working with Others. The 2-level Pass/Fail Appraisal Program gives the employee a rating of record of Pass (equivalent to Fully Successful) or Fail (equivalent to Unacceptable).

These performance appraisal programs are designed to give supervisors and managers the ability to better manage the workforce by providing them with a systematic way to: (1) tell employees what is expected of them; (2) tell employees how they are doing; (3) recognize and motivate employees; and (4) assist employees in improving performance.

All three performance programs have the following items in common:

1. Employees provide input in the elements and standards or participate in the discussion of the supervisor's expectation for performance;
2. Have written elements and performance standards, i.e., critical elements, or core competencies;
3. Require that mid-term progress reviews between the rating official and employee take place;
4. Conclude with a written appraisal of performance and an annual rating of record; and
5. Supervisor determines Overall Summary Rating after evaluation of the employee's performance on each of the job elements.

V. Key External Workforce Drivers

Key external workforce drivers will help shape the FCC's future workforce. The FCC's current and future external workforce drivers fall into five general categories: (1) Technological Advancement; (2) Market and Economic Developments; (3) Public Safety and Homeland Security Support; (4) Consumer Protection and Advocacy; and (5) Legislative and Legal Requirements. These drivers support a continued FCC campaign to attract and train a workforce of energetic, highly-skilled professionals to carry out the FCC's mission.

Technological Advancement

Technological innovation and product development are significant contributors to FCC workloads. Manufacturers and service providers continue developing new and innovative technologies. The communications industry's drive to implement increasingly complex communications products, involving every form of delivery, will require the FCC to adapt quickly. As a result, FCC staff will need to model and understand competing interests, identify and monitor possible interference, and develop interference mitigation policies, techniques, and other tools as needed to advance the Agency's mission.
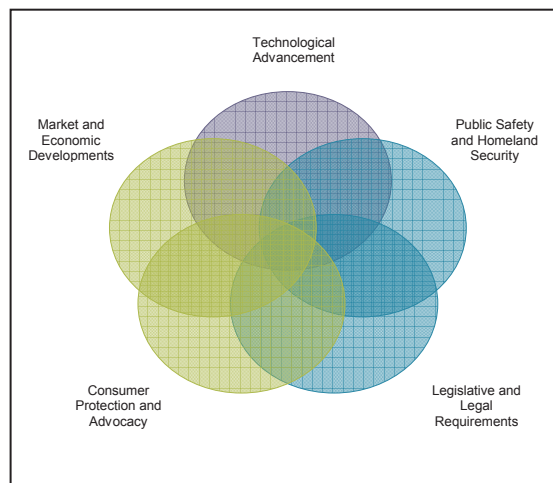
Innovation in wireless and satellite technologies also drives a demand for spectrum. This demand will require FCC staff to develop novel mechanisms to accommodate that demand to promote competition and broadband deployment throughout the Nation. Likewise, wireline and cable system technologies are evolving rapidly, challenging FCC staff to adapt. FCC staff can be expected to continue to confront complex legal, technical, and policy issues implicated by efforts to foster competition and promote broadband deployment. To accomplish these objectives in a way that adapts to and reflects the constant changes in technology, the FCC workforce must have the requisite training, experience, and expertise.

Market and Economic Developments

Market forces can be expected to continue to push telecommunications companies towards innovative financial strategies and novel combinations. The FCC's public interest obligations will require the FCC to review the competitive impact of these activities and investments, reviews that can only be accomplished by skilled and experienced attorneys, economists, and other professionals with highly-developed technical, analytical, and legal expertise.

As stewards of the country's public airwaves, the FCC's spectrum market activities contribute directly to the communications marketplace and economy. As the wireless sector of the communications industry continues to demand access to additional spectrum, the FCC will be required to develop more advanced market-based techniques in response. To do so in a procompetitive manner, FCC employees will be required to understand changing industry demands from legal, economic, and technical points of view.

Innovations in devices that operate over the nation's spectrum commons will also challenge the FCC's engineering workforce as new licensed and unlicensed devices are brought to market. Because spectrum knows no borders, access to spectrum for American business also demands expert representation in regional and international fora including the International Telecommunication Union. The FCC's rapid, skilled response to innovation is crucial to the continued development of the communications marketplace. Performing this highly specialized work requires a work force that is experienced, talented and adaptable.

Public Safety and Homeland Security

Homeland security and public safety work are increasingly driving the need for a more highly-trained professional workforce. Drivers in this area range from immediate disaster relief activities to long-term work towards developing an interoperable, nation-wide, first responder system. Current FCC work in this area includes international and cross border negotiations for new systems, authorization of satellite/terrestrial hybrid communications systems, improved E-911 and Emergency Alert Systems, Communications Assistance for Law Enforcement Act (CALEA) and law enforcement support, and other priority activities.

The dynamic communications industry and the growing sophistication of the Nation's telecommunications networks ensure that public safety and homeland security demands will drive FCC staff work well into the future. As networks change and new capabilities are deployed, FCC staff will need to evaluate and maintain standards for law enforcement support, network reliability, outage reporting, cyber security, and other essential public safety and homeland security needs. FCC work in this area is also driven by an increasing need to plan for the FCC's own continuity of operations and facility reconstitution.

The demands for ensuring public safety and homeland security must be met by a highly-

trained workforce including attorneys, engineers, and other professionals educated in public safety and homeland security issues. FCC staff must understand the intricacies of evolving networks and coordinate increasingly with professionals in the Department of Homeland Security and with state and local public safety officials throughout the country to maintain network reliability and ensure that the needs of the public safety community are met.

Consumer Protection and Advocacy

Continued development in the communications industry will create significant consumer protection and advocacy challenges. In the area of media and content, the FCC staff must remain vigilant in the protection of consumers from indecency, violence, and other unwanted content.

Additional consumer protection and advocacy challenges arise from complex changes in the international and domestic telecommunications marketplaces. Current practices with international mobile termination rates, calling party pays, and the rise of voice over the internet, demand that the FCC monitor developments and analyze how these services impact consumers. Rapidly developing alternative services create opportunity for competition, but may also create consumer confusion and the possibility of unfair or unreasonable charges or practices. The Commission will monitor market developments to ensure consumers are protected and service providers are meeting their obligations. In addition, technological developments may raise privacy issues that the Commission must be prepared to address. Whether sensitive customer data is adequately protected by telecommunications service providers will continue to be a concern. Protecting consumers from unwanted intrusions will also continue to be a focus of the Commission. Do-not-call and junk fax enforcement, for example, will remain a core focus of the Commission's consumer

protection efforts. Similarly, transitions in the marketplace, such as digital transition, mandate that FCC staff be prepared to educate consumers regarding their rights and responsibilities. The FCC will be required to bring substantial expertise to bear to protect and educate consumers in the evolving communications market.

The maturation of the communications industry also presents challenges relating to the deployment of services to rural and insulated communities, as well as persons with disabilities. As multiple platforms and services emerge, the need to support universal deployment and access opportunities for all Americans will demand creative work and careful oversight from FCC professionals.

Legislative and Legal Requirements

A significant portion of the FCC's current and future work involves responses to legislative and legal demands. Currently, the FCC is responsible for producing numerous competition and industry reports to Congress including reports on, Satellite Competition, Commercial Mobile Radio Services (CMRS) Competition, Video Competition, and Cable Competition.

In addition, the FCC is responsible for a number of congressionally mandated reviews of rules and regulations including the Biennial Review and Quadrennial Review of Media Ownership Rules. These legal requirements and reports include sophisticated economic and legal analysis that can only be performed by highly-trained, educated staff. The FCC is also subject to numerous legislative requirements outside those relating to the communications industry itself such as laws and regulations applying to small businesses, government procurement, internal management, fee collection, and government ethics. Proper administration of these mandates demands FCC staff with expertise in these requirements.

VI.   Future Workforce Needs

A comprehensive review of the FCC's current and future workforce drivers reveals a pressing need to recruit and maintain an energetic, educated workforce to meet coming demands. All indications are that the FCC should implement a strategic human capital plan that will increase the percentage of highly-trained attorneys, economists and engineers, along with professionals capable of supporting these occupations. In light of the external demands and the make-up of the current workforce, the FCC has begun to recruit both skilled talent to provide for adequate succession planning while bringing on new talent in a timeframe that can take advantage of institutional knowledge needed to address the FCC's complex workload.

The skills most highly associated with the FCC's workforce needs are outlined below:

1.   Legal Skills

- *General Legal Specialties*

Antitrust, Bankruptcy, Congressional and Legislative Process, Corporate, Disability Rights, Employment, Environmental, Federal Labor, Government Ethics, Government Procurement, Intellectual Property, Mediation, Trial and Appellate Litigation

- *Communications Specialties*

Domestic and International Telecommunications Law and Policy, International/Bilateral Negotiations, Media and First Amendment Law' Satellite and Spectrum Management Requirements

2.   Economic Skills

Applied Micro and Macro Economic Expertise, Competition Analysis, Econometrics, Theoretical and Experimental Economics

3.   Engineering Skills

- *Radio Frequency Engineering*

Analog, Antenna Design, Digital, Interference Analysis, Propagation, Receiver Design, Satellite, Spectrum Analysis

- *Network & IP Engineering*

Data Networking, Data Transmission, Microprocessing, Multi-platform, Network Control, Network Design, Video Networking, Wireless Networking

- *Other Engineering*

Audio/Video Processing, Consumer Premise Equipment, Domestic and International Telecommunications Regulations & Policy, International/Bilateral Negotiations, Software, Systems Design, Technical Writing

VII.   Conclusions

Because of the complex and rapid changes that characterize the legal, economic and technical aspects of the telecommunications industry, the FCC must have a strong, highly skilled yet still adaptable workforce. In the coming years, the FCC's workforce will undergo significant change due to a large number of employees who are eligible for retirement. In addition to the impact on the agency's technical expertise, there will be shifts in the make-up of the leadership and supervisory core of the agency. To address all of these issues, the FCC is implementing a strategic human capital initiative that will simultaneously recruit new talent and continue to train existing and new employees to meet the complex challenges presented by the marketplace as well as the leadership challenges associated with accomplishing the agency's core mission. In summary, the FCC's strategy is made up of these three core initiatives:

1. Recruit. Continuing to replenish the non-supervisory workforce with a rejuvenated entry and mid-level recruiting program.

2. Train. Develop an adequately sized pool of high-potential candidates available to take on supervisory and technical challenges.

3. Reward. Build a results-oriented performance culture.

By implementing attorney, economist, and engineer hiring programs at this stage the FCC has taken an important step toward meeting the challenges associated with its mission. In addition, since a key issue for the Agency is how to capture the knowledge of those who are approaching retirement eligibility and transition to others so that it is not lost to the Agency, the FCC is addressing this issue by encouraging senior staff to develop and teach courses to share their knowledge. The Commission also encourages those approaching retirement to focus their Personal Development Plans on the development of others and the transitioning of their expertise. The FCC intends to supplement these efforts with a formal mechanism to facilitate the development of mentoring relationships between senior staff and high potential candidates for future leadership positions.

The FCC plays a crucial role in our nation's economy and in the advancement of public safety. To do so effectively, efficiently and in the public interest, the Commission requires a workforce that is both committed to its mission and well trained to carry it out. The FCC's workforce must shift over time to adapt to changes in the legal, economic, and technical arenas. The FCC has designed a strategic human capital plan that will ensure that the evolving workforce will be able to continue to successfully carry out its core and critical mission for the American public.

VIII. Implementing the FCC's Strategic Human Capital Plan

Continue to build a results-oriented performance culture

- Assess each year's Annual FCC Employee Survey results and develop plans to address areas needing improvement.

- Institute a four-level rating system.

- Strengthen the link between organizational goals and performance management and recognition.

  - A pay for performance system has been developed and implemented for the Senior Executive Service. This system links organization goals to individual performance reviews by aligning expectations of executive performance directly to the FCC's Strategic Plan.

- Implement a Human Capital Accountability and Performance Measurement System.

  - Requires an annual assessment of agency human capital management and results including compliance with relevant laws, rules and regulations.

  - The FCC has an interagency agreement with the OPM to assist in completing this action.

Rejuvenate the recruiting program and reshape the workforce

- Develop an assessment approach to gain a better understanding of the mission critical skills that need to be obtained when recruiting and hiring new employees, and develop strategies to acquire and develop those skills.

- Reshape the workforce to shift resources to mission critical occupations via a request for Voluntary Early Retirement Authority for specific occupations.

- Expand the recruitment plans to hire entry-level engineers, Honors Attorneys, and senior level economists on an annual basis.

  - **The Engineer-in-Training (EIT) Program** is announced each August and the FCC hires engineering school graduates with superior academic credentials and provides comprehensive training in the field of communications. Applications for multiple openings are accepted from recent or soon-to-be engineering graduates during three application windows.

  - Participate in OPM's four Federal Career Days scheduled in the Fall. These included an emphasis on recruiting engineers.

  - **The Attorney Honors Program** is announced each September to enable the FCC to compete for top caliber students who participate in the traditional fall interview/job offer process. Through the Attorney Honors Program, the FCC hires recent law school graduates with superior academic credentials and provides two years of training and development in the field of communications law and policy.

  - Supplement the current Legal Intern Program with a Summer Associate Program for Attorneys that would be designed to lead to permanent employment.

  - **The Economist Recruitment Initiative** is announced each October through professional economic publications prior to the American Economic Association meeting every January. The FCC conducts onsite recruitment and interviews at the meetings, ensuring that the FCC attracts the best candidates nationwide.

Develop a pool of high-potential candidates for future supervisory and technical expert vacancies

- Develop and establish a formal succession management program for leadership positions.

- Institute a management and leadership development program to build a cadre of leaders who are prepared to assume future supervisory, managerial, and executive responsibilities.

- Create a mechanism to facilitate the development of mentoring relationships between senior staff and high potential candidates for future leadership positions.

- Develop a succession management review process to ensure that those perceived as high-potential candidates for future leadership positions are developing their leadership skills as well as their technical skills.

- Evaluate the costs and benefits of expanding the knowledge sharing program to additional occupations beyond the engineers currently participating.

- Evaluate the costs and benefits of expanding the Graduate Degree Program to include Masters of Business Administration and other advanced degrees that are directly related to the FCC's mission.

Appendix

FCC Workforce Planning Model

- Analyze Current Workforce
- Analyze Future Workforce Requirements
- Analyze Gaps in Workforce
- Develop Strategies to Close Gaps
- Implement Workforce Strategies
- Monitor, Evaluate and Revise